

320. The pharmaceutical composition of claim 318, wherein said cell is a mammalian cell.

321. **A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises amino acids 32 to 194 of Figure 7 or comprises a segment of said polypeptide, wherein said polypeptide and segment thereof has mitogenic activity on BALB/MK cells.**

322. The pharmaceutical composition of claim 321, wherein said polypeptide or segment thereof comprises Met at the amino terminus.

323. The pharmaceutical composition of claim 321, wherein five nanomolar concentration of said polypeptide or segment thereof elicits less than one-fold stimulation over background in NIH/3T3 cells.

324. The pharmaceutical composition of claim 321, wherein said polypeptide or segment thereof is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

325. The pharmaceutical composition of claim 321, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

326. The pharmaceutical composition of claim 321, wherein an amount of said polypeptide or segment thereof that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50'th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

327. The pharmaceutical composition of claim 321, wherein an amount of said polypeptide or segment thereof that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

328. The pharmaceutical composition of claim 321, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide or segment thereof obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

329. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises the amino acids 32-194 of Figure 7 or comprises a segment of said polypeptide which is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78.

330. The pharmaceutical composition of claim 329, wherein said polypeptide or segment thereof comprises Met at the amino terminus.

331. The pharmaceutical composition of claim 329, wherein said polypeptide or segment thereof, which has mitogenic activity on BALB/MK keratinocyte cells.

332. The pharmaceutical composition of claim 329, wherein said polypeptide or segment thereof has mitogenic activity on epithelial cells.

333. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises amino acids 32-194 of Figure 7 or comprises a segment of said polypeptide which is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from the C terminus toward the N terminus, within the region of amino acids 194 to 189.

334. The pharmaceutical composition of claim 333, wherein said polypeptide or segment thereof comprises Met at the amino terminus.

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335. The pharmaceutical composition of claim 333, wherein said polypeptide or segment thereof has mitogenic activity on BALB/MK .keratinocyte cells

336. The pharmaceutical composition of claim 333, wherein said polypeptide or segment thereof has mitogenic activity on epithelial cells.

337. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises amino acids 32-194 of Figure 7 or comprises a segment of said polypeptide which is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78 and is truncated from the C terminus toward the N terminus, within the region of amino acids 194 to 189.

338. The pharmaceutical composition of claim 337, wherein said polypeptide or segment thereof comprises Met at the amino terminus.

339. The pharmaceutical composition of claim 337, wherein said polypeptide or segment thereof has mitogenic activity on BALB/MK keratinocyte cells.

340. The pharmaceutical composition of claim 337, wherein said polypeptide or segment thereof has mitogenic activity on epithelial cells.

341. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises amino acids 32-194 of Figure 7.

342. The pharmaceutical composition of claim 341, wherein said polypeptide comprises Met at the amino terminus.

343. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide prepared by expressing in a host cell a DNA encoding an amino acid sequence comprising amino acids 32-194 of Figure 7 or encoding an amino acid sequence which is a segment of amino acids 32-194 of Figure 7, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78.

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344. The pharmaceutical composition of claim 343, wherein said DNA encodes Met at the amino terminus.

345. The pharmaceutical composition of claim 343, wherein said polypeptide has mitogenic activity on BALB/MK keratinocyte cells.

346. The pharmaceutical composition of claim 343, wherein said polypeptide has mitogenic activity on epithelial cells.

347. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises amino acids 32 to 194 of Figure 7 or comprises a segment of said polypeptide, and wherein said polypeptide and segment thereof has mitogenic activity on epithelial cells.

348. The pharmaceutical composition of claim 347, wherein said polypeptide or segment thereof comprises Met at the amino terminus.

349. The pharmaceutical composition of claim 347, wherein said polypeptide is a segment of the polypeptide of Figure 7.

350. The pharmaceutical composition of claim 347, wherein five nanomolar concentration of said polypeptide or segment thereof elicits less than one-fold stimulation over background in NIH/3T3 cells.

351. The pharmaceutical composition of claim 347, wherein said polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

352. The pharmaceutical composition of claim 347, wherein an amount of said polypeptide or segment thereof that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

353. The pharmaceutical composition of claim 347, wherein an amount of said polypeptide or segment thereof, that stimulates maximal thymidine incorporation in BALB/MK. keratinocyte cells, stimulates less than 1/50'th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

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354. The pharmaceutical composition of claim 347, wherein an amount of said polypeptide or segment thereof that stimulates maximal. thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in, NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

355. The pharmaceutical composition of claim 347, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide or segment thereof obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

356. **A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide comprising a segment of amino acids 32-94 of Figure 7, wherein said**

polypeptide and segment thereof has mitogenic activity on epithelial cells and wherein said polypeptide is unglycosylated.

357. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide comprising a segment of amino acids 32-194 of Figure 7, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78, and wherein said polypeptide is unglycosylated.

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358. The pharmaceutical composition of any of claims 316 to 355, wherein said polypeptide or segment thereof is unglycosylated.

359. The pharmaceutical composition of any of claims 316 to 355, wherein said polypeptide or segment thereof is glycosylated.--
